IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) An intelligent digital broadcast scheduling system, said scheduling system arbitrating the use of specified broadcast time slots, said broadcast comprising one or more or a combination of data content comprising audio, video, text, graphics, images, or ~~data; said~~ data, said data content available across networks, said scheduling system comprising:

     a messaging protocol, said protocol comprising at least: priority indicators, service categories, and service classes;

     an arbitrator, said arbitrator intelligently determining a relative value of specified priority indicators, service categories, and service classes of data content entities from a group of requesting content providers;

     a scheduler, said scheduler collecting and sequencing said data content for broadcast based on said arbitrator determinations; and

     an ~~IBOC~~ in-band on-channel (IBOC) network broadcasting said data content as per said sequence.

2.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said system comprises a hierarchy of gateways, one or more first level gateways arbitrating and scheduling a first data content level and one or more second level gateways operatively connected to said first level gateway(s) and arbitrating and scheduling a second data content level.

3. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said one or more first level gateways arbitrating and scheduling a first data content level comprise at least a central gateway receiving requests from a plurality of national/international content providers.

4. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said one or more second level gateways receive requests from a plurality of local content providers.

5. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said data content is arbitrated based on a plurality of the following parameters: data content, transmission requirements, data type, time, end user device requirements.

6. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said data content is prioritized, based on said priority indicators, as one of the following: extreme high priority for immediate data transmission, high priority for transmission at earliest opportunity, normal according to requested repetition rate, and background/low for transmission in slots left free after transmission of messages of extreme high priority, high priority, and normal priority.

7. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said priority indicators comprise one or more of the following fields: level of service, bit rate requirements, latency grades, or best effort required.

8.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said protocol includes message fields comprising a service operator code identifying said data content provider.

9.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said protocol includes message fields comprising a destination address representing a broadcast, multicast, or unicast scenario.

10.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said service classes comprise at least basic, preferred, or premium.

11.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said service categories comprise at least one, or a combination of: administrative, maintenance, advertisement, news (local, regional, national, international, sports, weather, traffic, emergency alert, stocks (local, national, regional, international), entertainment, travel entities, medical, multimedia, audio, logo, or text.

12.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said message protocol further includes language filtration identifiers.

13.   (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said message protocol further includes periodicity requirements.

14. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said message protocol further includes validity determinations including periods of validity.

15. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said message protocol further includes time stamps of said specified data content.

16. (Currently Amended) An intelligent digital broadcast scheduling system, as per ~~claim 1~~ claim 14, wherein said message protocol further includes periodicity requirements.

17. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said message protocol further includes geographic classifications.

18. (Original) An intelligent digital broadcast scheduling system, as per claim 1, wherein said message protocol further includes client display execution limitations.

19. (Currently Amended) An intelligent digital broadcast scheduling system, said scheduling system arbitrating the use of specified broadcast time slots, said broadcast comprising one or more or a combination of data content comprising audio, video, text, graphics, images, or ~~data; said~~ data, said data content available across networks, said scheduling system comprising:

one or more gateways arbitrating and scheduling first and second data content levels, said first and second data content levels received from a plurality of operatively connected data content providers;

a messaging protocol, said messaging protocol used to identify parameters of

said requests and comprising at least: priority indicators, service categories and

service classes;

an arbitrator, said arbitrator intelligently determining a relative value of

specified priority indicators, service categories and service classes of data content

entities from a group of requesting content providers;

a scheduler, said scheduler collecting and sequencing said data content for

broadcast based on said arbitrator determinations, and

an ~~IBOC~~ in-band on-channel (IBOC) network broadcasting said data content

as per said sequence.

20.   (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein

said system comprises a hierarchy of gateways, one or more first level gateways

arbitrating and scheduling a first data content level and one or more second level

gateways operatively connected to said first level gateway(s) and arbitrating and

scheduling a second data content level.

21.   (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein

said one or more first level gateways arbitrating and scheduling a first data content

level comprise at least a central gateway receiving requests from a plurality of

national/international content providers.

22.   (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein

said one or more second level gateways receive requests from a plurality of local

content providers.

23. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said data content is arbitrated based on a plurality of the following parameters: data content, transmission requirements, data type, time, end user device requirements.

24. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said data content is prioritized, based on said priority indicators, as one of the following: extreme high priority for immediate data transmission, high priority for transmission at earliest opportunity, normal according to requested repetition rate, and background/low for transmission in slots left free after transmission of messages of extreme high priority, high priority, and normal priority.

25. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said priority indicators comprise one or more of the following fields: level of service, bit rate requirements, latency grades, best effort required.

26. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said protocol includes message fields comprising a service operator code identifying said data content provider.

27. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said protocol includes message fields comprising a receiver destination address representing a broadcast, multicast or unicast scenario.

28. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said service classes comprise at least basic, preferred, or premium.

29. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said service categories comprise at least one, or a combination of: administrative, maintenance, advertisement, news (local, regional, national, international, sports, weather, traffic, emergency alert, stocks (local, national, regional, international), entertainment, travel entities, medical, multimedia, audio, logo, or text.

30. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said message protocol further includes language filtration identifiers.

31. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said message protocol further includes periodicity requirements.

32. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said message protocol further includes validity determinations including periods of validity.

33. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said message protocol further includes time stamps of said specified data content.

34. (Currently Amended) An intelligent digital broadcast scheduling system, as per ~~claim 19~~ claim 32, wherein said message protocol further includes periodicity requirements.

35. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said message protocol further includes geographic classifications.

36. (Original) An intelligent digital broadcast scheduling system, as per claim 19, wherein said message protocol further includes client display execution limitations.

37. (New) A method for intelligently scheduling digital broadcast data content, comprising the steps of:

determining a relative value of specified priority indicators, service categories, and service classes of a messaging protocol for said data content;

collecting and sequencing said data content for broadcast based on said relative value generated in said determining step; and

communicating said data content over an in-band on-channel (IBOC) network as per the sequence of said scheduling step.

38. (New) A digital broadcast scheduling system, comprising:

a computer processor; and

a memory, wherein the computer processor is configured to execute the steps of:

determining a relative value of specified priority indicators, service categories, and service classes of a messaging protocol for data content;

collecting and sequencing said data content for broadcast based on said relative value generated in said determining step; and

communicating said data content over an in-band on-channel (IBOC) network as per the sequence of said scheduling step.